



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/550,167	04/14/2000	Hiroaki Sudo	JEL31064	8830

7590

02/25/2004

Stevens Davis Miller & Mosher LLP  
Suite 850  
1615 L Street N W  
Washington, DC 20036

EXAMINER

PIZARRO, RICARDO M

ART UNIT

PAPER NUMBER

2661

DATE MAILED: 02/25/2004

6

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/550,167

Applicant(s)

SUDO ET AL.

Examiner

Ricardo M. Pizarro

Art Unit

2661

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 14 April 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 14-16 is/are rejected.
- 7) ☒ Claim(s) 2-13, 17 and 18 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Objections*

1. Claim 16 is objected to because of the following informalities: In lines 2 and 6 replace the first occurrence of "the" with -a-.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

3. Claims 1 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Sano.

Art Unit: 2661

US patent No. 6,381,251 ( Sano et al) discloses a data transmission apparatus and receiving apparatus using orthogonal frequency division multiplexing modulation, comprising

An OFDM apparatus comprising a transmitter ( Transmitter 200 in Fig. 10) having adder for adding a symbol for synchronization pull-in to a valid symbol ( col 5 lines 20-30) and inserter for inserting a correlation value suppression signal immediately after the symbol ( col 2 lines 53-59) , a receiver (Receiver 201 in Fig. 10) having correlation value calculator for calculating a correlation value using a reception signal and symbol synchronizer for establishing symbol synchronization ( correlation of signal contained in receiver, col 8 lines 63-67, col 9 lines 1-7, Fig. 18 ) by carrying out threshold judgment on the calculated correlation value ( col 3 lines 25-34) as an claim 1.

4. Claim 14-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Sano.

US patent No. 6,381,251 ( Sano et al) discloses a data transmission apparatus and receiving apparatus using orthogonal frequency division multiplexing modulation, comprising

a base station apparatus ( elements 200 and 201 in Fig. 10) comprising an OFDM communication apparatus, said OFDM apparatus comprising a transmitter having adder for adding a symbol for synchronization pull-in to a valid symbol ( col 5 lines 20-30) and inserter for inserting a correlation value suppression signal immediately after the symbol ( col 2 lines 53-59), a receiver (Receiver 201 in Fig. 10) having correlation value calculator for calculating a correlation value using a reception signal and symbol synchronizer for establishing symbol synchronization ( correlation of signal contained in receiver, col 8 lines 63-67, col 9 lines 1-7,

Art Unit: 2661

Fig. 18 ) by carrying out threshold judgment on the calculated correlation value ( col 3 lines 25-34), as in claim 14.

***Allowable Subject Matter***

5. Claims 2-13 , 17-18 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claim.

***Conclusion***

6. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 872-9314

(for formal communications intended for entry, for informal or draft communications, please label "PROPOSED" or "DRAFT")

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington. VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to **Ricardo Pizarro** whose telephone number is (703) 305-1121. The examiner can normally be reached on Monday-Friday from 9:00 AM to 5:30 PM. The fax number for this Group is (703) 872-9314.

Art Unit: 2661

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, **Douglas Olms**, can be reached on (703) 305-4703.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

February 19, 2004

*Ricardo M. Pizarro*

*Douglas W. Olms*

DOUGLAS OLMS  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600